

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claim 1 and AMEND claims 2, 3, 5, 7-11, 15, 16, 19 and 20 in accordance with the following:

1. (CANCELLED)

2. (CURRENTLY AMENDED) ~~The disc centering device according to claim 1, wherein the chuck includes a collet which grabs or relieves the hub unit according to whether a compressed air is provided to the chuck.~~ A disc centering device comprising:

a base plate;

a chuck installed on the base plate, the chuck having a collet which grabs or relieves the hub unit according to whether a compressed air is provided to the chuck;

a hub unit which is detachably engaged to the chuck and receives discs to be stacked;

disc pushers which are slidably provided outside of the hub unit and include corresponding pressure members which push circumferences of the discs and center the discs;
and

a driving unit which drives the disc pushers simultaneously.

3. (CURRENTLY AMENDED) The disc centering device according to claim 42, wherein the hub unit comprises:

a hub body which is detachably engaged to the chuck and receives the discs; and

a hub cap which moves up or down to press the discs stacked with respect to the hub body.

4. (ORIGINAL) The disc centering device according to claim 3, wherein the hub cap moves up or down according to whether a compressed air is provided to the hub unit.

5. (CURRENTLY AMENDED) The disc centering device according to claim 42, wherein the disc pushers are provided in a radial direction relative to the hub unit.

6. (ORIGINAL) The disc centering device according to claim 5, wherein the disc

pushers include first, second and third disc pushers which are provided at intervals of 120 degrees with respect to the hub unit.

7. (CURRENTLY AMENDED) The disc centering device according to claim 42, wherein the driving unit includes:

- a motor;
- a belt pulley which is connected to the motor and the disc pushers; and
- a link which is linearly moved by the belt pulley and simultaneously moves the disc pushers back or forth.

8. (CURRENTLY AMENDED) The disc centering device according to claim 42, wherein the driving unit includes cylindrical actuators which drive the corresponding disc pushers.

9. (CURRENTLY AMENDED) The disc centering device according to claim 42, wherein the pressure members respectively include plate springs which simultaneously pressurize the circumferences of the discs having different diameters.

10. (CURRENTLY AMENDED) The disc centering device according to claim 42, further comprising a linear guide unit which mounts the disc pushers, wherein the linear guide unit slides the disc pushers according to the driving unit.

11. (CURRENTLY AMENDED) The disc centering device according to claim 42, wherein the pressure members respectively include one or more elastic members which simultaneously pressurize the circumferences of the discs having different diameters, so as to center the discs.

12. (ORIGINAL) The disc centering device according to claim 2, wherein the chuck further includes:

- a chuck body which defines the chuck;
- an air chamber which is provided in the chuck body;
- an air port which supplies the compressed air to the air chamber; and
- a piston which is provided in the chuck body and moves up or down according to whether the compressed air is provided to the air chamber, wherein the collet grabs or relieves the hub unit according to an up or down movement of the piston.

13. (ORIGINAL) The disc centering device according to claim 3, wherein the hub unit further comprises:

an air chamber which is provided in the hub body to receive a compressed air; and
a piston which is provided in the hub body and moves up or down according to whether the compressed air is provided to the air chamber, wherein the hub cap is provided at an upper portion of the hub body, and pushes or releases the disc with respect to the hub body according to an up or down movement of the piston.

14. (ORIGINAL) The disc centering device according to claim 9, wherein each of the pressure members further includes fixing units which fix side ends of the corresponding plate spring.

15. (CURRENTLY AMENDED) The disc centering device according to claim 42, wherein:

the disc pushers move forward to contact and center the discs, and
the hub unit includes a hub cap which clamps the centered discs.

16. (ORIGINAL) The disc centering device according to claim 42, wherein the disc pushers simultaneously pressurize the circumferences of the discs so as to center the discs.

17. (WITHDRAWN) A disc centering device comprising:
a base plate;
a chuck which is installed on the base plate;
a hub unit which is detachably engaged to the chuck and receives discs to be stacked;
a disc centering unit having pushing members which are slidably provided outside of the hub unit and simultaneously pressurize circumferences of the discs to center the discs; and
a driving unit which drives the disc centering unit.

18. (WITHDRAWN) The disc centering device according to claim 17, wherein the pushing members respectively include plate springs which pressurize the circumferences of the discs having different diameters.

19. (CURRENTLY AMENDED) A disc centering device, comprising:

a hub unit which receives a plurality of discs to be stacked;

a chuck body installed on a base plate, the chuck body including a first piston which rises according to a provision of compressed air, and a collet which grabs or relieves the hub unit according to the an up or down movement of the first piston ~~the hub unit being chucked on the chuck;~~ and

disc pushers which are slidably provided outside of the hub and include corresponding pressure members which push circumferences of the plurality of discs and center the plurality of discs.

20. (CURRENTLY AMENDED) A disc centering device, comprising:

a hub unit which receives a plurality of discs to be stacked;

a chuck having a collet which alternatively moves up and down by compressed air to ~~grabs and releases~~ release and grab the hub unit;

disc pushers which are slidably provided outside of the hub and include corresponding pressure members which push circumferences of the plurality of discs and center the plurality of discs; and

a driving unit which drives the disc pushers.